

IN THE CLAIMS:

Claims 1-22 (canceled).

Claim 23 (new) A method for transforming a germinating plant seed that is susceptible to transformation with *Agrobacterium*, said method including:

(a) providing an *Agrobacterium* strain capable of transforming the germinating plant seed with a DNA of interest;

(b) providing a wetting agent or surfactant that facilitates or enhances penetration and transformation of the germinating plant seed by the *Agrobacterium* strain; and

(c) contacting the germinating plant seed with the wetting agent or surfactant and the *Agrobacterium* strain with the DNA of interest under conditions effective to cause cells of the plant germinating seed to be transformed with the DNA of interest to form a transformed plant seed, said conditions including a vacuum infiltration of the germinating plant seed while the germinating plant seed is contacting the wetting agent or surfactant and the *Agrobacterium* strain and, optionally, a subsequent incubation of the germinating plant seed with the wetting agent or surfactant and the *Agrobacterium* strain.

Claim 24 (new). The method as claimed in claim 23, wherein the wetting agent or surfactant is a non-oil based wetting agent or surfactant.

Claim 25 (new). The method as claimed in claim 23, wherein the wetting agent or

surfactant comprises a polyether polymethyl siloxane copolymer.

Claim 26 (new). The method as claimed in claim 23, wherein the plant seed is a dicotyledonous plant seed.

Claim 27 (new) The method as claimed in claim 23, in which the *Agrobacterium* strain and the wetting agent or surfactant are in the form of an admixture, the wetting agent or surfactant and the *Agrobacterium* strain being present in the admixture in a mass ratio of the wetting agent or surfactant: *Agrobacterium* strain of between 1:99 and 1:10000.

Claim 28 (new) The method as claimed in claim 23, in which the germinating plant seed is subjected to vacuum infiltration for a period of between 5 minutes and 40 minutes.

Claim 29 (new) The method as claimed in claim 23, in which the germinating plant seed is contacted with the wetting agent or surfactant and the *Agrobacterium* strain for a period of up to 48 hours, at a temperature of between 15 °C and 35 °C.

Claim 30 (new) The method as claimed in claim 23, in which the *Agrobacterium* strain is *Agrobacterium tumefaciens*.

Claim 31 (new) The method as claimed in claim 23, in which the *Agrobacterium*

strain includes said DNA of interest which includes appropriate regulatory sequences so as to be expressed in the cells of a plant which is cultivated from the transformed plant seed.

Claim 32 (new) The method as claimed in claim 31, in which the DNA of interest confers at least disease resistance or drought resistance to the plant which is obtained from the transformed plant seed.

Claim 33 (new) The method as claimed in claim 23, in which the *Agrobacterium* strain includes a plasmid comprising vector pBI121.

Claim 34 (new) The method as claimed in claim 31, in which the *Agrobacterium* strain includes a plasmid which includes both said DNA of interest and DNA comprising a selectable marker, the DNA comprising a selectable marker also including appropriate regulatory sequences so as to be expressed in the cells of the plant which is obtained from the transformed plant seed.

Claim 35 (new) The method as claimed in claim 34, in which the DNA comprises a selectable marker that codes for antibiotic resistance, thus imparting resistance to an antibiotic selection agent to the plant which is obtained from the transformed plant seed.

Claim 36 (new) The method as claimed in claim 35, in which the antibiotic selection

agent is kanamycin or rifampicin or both, and in which the DNA comprising a selectable marker is a GUS DNA coding sequence comprising an intron.

Claim 37 (new) The method as claimed in claim 23, in which the germinating plant seed is from the family Leguminosae.

Claim 38 (new) The method as claimed in claim 37, in which the germinating plant seed is soybean seed.

Claim 39 (new) The method as claimed in claim 37, in which the germinating plant seed is lupin seed.

Claim 40 (new) The method as claimed in claim 23, which includes germinating the germinating plant seed at a temperature of between 22°C and 32°C, for a period of up to 5 days, before simultaneously contacting the germinating plant seed with the wetting agent or surfactant and the *Agrobacterium* strain.

Claim 41 (new) A transformed plant seed produced by the method as claimed in claim 23.

Claim 42 (new) A transformed plant obtained from the transformed plant seed as claimed in claim 41.

Claim 43 (new). The method as claimed in claim 23, wherein the method comprises said subsequent incubation of the germinating plant seed with the wetting agent or surfactant and the *Agrobacterium* strain.